



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/596,622

06/19/2006

Thomas Nissl

NISSL-2

8513

20151 7590 10/03/2008

HENRY M FEIEREISEN, LLC

HENRY M FEIEREISEN

708 THIRD AVENUE

SUITE 1501

NEW YORK, NY 10017

EXAMINER

WOLF, MEGAN YARNALL

ART UNIT

PAPER NUMBER

3738

MAIL DATE

DELIVERY MODE

10/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,622	<b>Applicant(s)</b> NISSL, THOMAS	
	<b>Examiner</b> MEGAN WOLF	<b>Art Unit</b> 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>061906</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be "material to patentability as defined in 37 CFR 1.56."

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites the limitation "an axial section of the arm" but claim 9 states that the axial sections and the arm are part of the tie bars and not that the axial sections are part of the arms. Claim 15 also states "an associated one of the first tie bars," but only one first tie bar is previously claimed. Appropriate clarification is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3738

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffer 6,786,922 in view of Lootz et al. 2002/0049487.

6. Re claim 9, Schaefer discloses a stent 10 for application in a body vessel, comprising a tubular support frame made of plural ring segments 12, which are arranged sequentially in an axial direction and formed by struts 16, 18, 20, and adjoin each other continuously via transitions 24, with each strut defined by a longitudinal strut axis, the support frame further including first and second tie bars 14 for connecting neighboring ring segments 12, each of the tie bars including an arm 38 extending in circumferential direction of the support frame and terminating on both ends in axial sections 14 for connection of the first and second tie bars to the transitions 24, wherein the axial sections of the first tie bars define a longitudinal axis (figs.1, 4). However, Schaefer does not teach that the struts have a wavy configuration and a width which as measured transversely to the longitudinal strut axis increases from midsection in a direction to the transitions, or that the tie bars are of wavy configuration and have a width which as measured transversely to the longitudinal axis that increases from the arm in a direction to the transitions.

Lootz teaches a stent, in the same field of endeavor, with bars 3" having a longitudinal axis, a wavy configuration, and a width that increases from the midsection 16 in a direction to the transition area 3.1" for the purpose of improving stress distribution as the shape memory stent self-expands (par.77-81; fig.5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the straight struts and tie bars of uniform width disclosed by Schaeffer to include a wavy configuration with a width increasing from a midsection to a transition as taught by Lootz in order to allow a stent formed from a shape memory material like Nitinol, which Schaeffer discloses in col.5, ll.1-4, to transition into a stress-induced state as the stent self-expands below the plastic deformation limit providing for better stress distribution and less chance of failure.

7. Re claims 10-13, see figs. 1-4.

8. Re claims 16-18, see Lootz fig.5, pars. 78 and 81.

9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffer 6,786,922 in view of Lootz et al. 2002/0049487 as applied to claim 9 above, and further in view of Bales et al. 6,878,162. Schaeffer in view of Lootz discloses the invention substantially as claimed but does not disclose that each third of the transitions has an end formed with a widened head which protrudes in the axial direction beyond neighboring ones of the transitions. Bales teaches a stent, in the same field of endeavor, wherein each third of the transitions 36 has a widened head 37 for the purpose of receiving a radiopaque marker (fig.1; col.4, ll.28-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a widened head for radiopaque markers as taught by Bales on the stent of Schaeffer in view of Lootz in order to attach markers at the end which allows a surgeon to visualize the stent while it is being deployed as well as after implantation to ensure proper placement. Regarding the limitations of claim 15, because the stent of Schaeffer is

Art Unit: 3738

unitary, a widened head attached to the end of a transition as modified by Bales will inherently be connected to an axial section of a tie bar.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEGAN WOLF whose telephone number is (571)270-3071. The examiner can normally be reached on Monday-Friday 7:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W./

Examiner, Art Unit 3738

9/30/08

/Bruce E Snow/

Primary Examiner, Art Unit 3738